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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/506,676 Filing Date: February 17, 2000 Appellant(s): KRONK, DAVID E.

William J. Barber (Reg. No. 32,720)

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 27, 2006 appealing from the Office action mailed June 24, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments

The appellant(s) statement of the status of amendments contained in the brief is correct.

Art Unit: 2155

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant(s) statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct except for claim 29.

A marked up version of claim 29 is presented below:

29. (previously presented) A method for controlling a plurality of outdoor environmental maintenance equipment based on an open client-server architecture for golf courses, ski resorts, other outdoor recreational areas or for any application involving and managing of an outdoor environment, comprising the steps of:

providing with client or user interfaces messages for controlling the plurality of outdoor environmental maintenance equipment, and receiving responses containing information about the plurality of environmental maintenance equipment;

associating each <u>client or user</u> interface with a respective client or user interface messaging control;

controlling with interface control servers the plurality of outdoor environmental maintenance equipment;

associating each interface control servers with a respective interface control server messaging controls; and

exchanging messages and communications between **the** interface control server messaging controls and client or user interface messaging control messages using a common messaging control protocol for controlling the plurality of outdoor environmental maintenance equipment, each messaging control being usable for communication with at least two or more other messaging controls in the system so that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment, and also can receive responses containing information about each of the plurality of outdoor environmental maintenance equipment.

(8) Evidence Relied Upon

U.S. Pat. No. 6,192,282 B1

Smith et al.

February 20, 2001

U.S. Pat. No. 5,568,402 A

Gray et al.

October 22, 1996

Art Unit: 2155

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

A. Claims 21-26 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al. (US 6192282 B1).

INDEPENDENT:

As per *claim 21*, *Smith* teaches a system for controlling a plurality of outdoor environmental maintenance equipment (see Fig.1 and col.10, lines 30-35) having different user interfaces based on an open client-server architecture (see col.2, lines 62-65; "open architecture") for golf courses, ski resorts, other outdoor recreational areas or for any application involving and managing of an outdoor environment (see Fig.1, #19: "outside air" and "weather station"; #21: "outdoor lights"; #23: "sprinklers" and "pool"; #25: "outdoor a/v"), comprising:

client or user interfaces for providing messages for controlling the plurality of outdoor environmental maintenance equipment, and receiving responses containing

Art Unit: 2155

information about the plurality of environmental maintenance equipment (see col.3, lines 51-57: "utilized to receive user inputs and display system status"; col.7, line 67-col.8, line 2: "exert control"; and col.9, lines 42-44: "plurality of different types of user interfaces");

client or user interface messaging controls, each associated with a respective one of the client or user interfaces (see col.15, lines 7-20 and 37-47);

interface control servers, each for controlling a respective one of the plurality of outdoor environmental maintenance equipment (Fig.1, #17, #19, #21, #23, #25, #27; col.3, lines 13-17: "Each of the building automation subsystems includes at least one end device which is subject to control"); and

interface control server messaging controls, each associated with a respective one of the interface control servers (see col.3, lines 29-34: "generating command signals in accordance with a particular control protocol which may be device specific"), the interface control server messaging controls and the client or user interface messaging controls exchanging messages and communicating with each other using a common messaging control protocol for controlling the plurality of outdoor environmental maintenance equipment (see col.3, lines 22-29: "interprocess control commands" and col.4, lines 17-26: "generic commands"), each messaging control being usable for communication with at least two or more other messaging controls in the system (see col.3, lines 22-34 and 42-50: "translate control instructions in one particular control protocol to control instructions in another different control protocol" and lines 57-60: "relationship between control applications and user interface devices... can be

changed during use") so that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment (see col.7, line 67-col.8, line 2: "exert control over these and other building systems" and col.15, lines 48-50: "controller 13 is thus capable of simultaneously interfacing to any number of these and other user interface devices"), and also can receive responses containing information about each of the plurality of outdoor environmental maintenance equipment (see col.15, lines 54-55).

As per *claim 29*, *Smith* teaches a method for controlling a plurality of outdoor environmental maintenance equipment (see Fig.1 and col.10, lines 30-35) based on an open client-server architecture (see col.2, lines 62-65; "open architecture") for golf courses, ski resorts, other outdoor recreational areas or for any application involving and managing of an outdoor environment (see Fig.1, #19: "outside air" and "weather station"; #21: "outdoor lights"; #23: "sprinklers" and "pool"; #25: "outdoor a/v"), comprising the steps of:

providing with client or user interfaces messages for controlling the plurality of outdoor environmental maintenance equipment, and receiving responses containing information about the plurality of environmental maintenance equipment (see col.3, lines 51-57: "utilized to receive user inputs and display system status"; col.7, line 67-col.8, line 2: "exert control"; and col.9, lines 42-44: "plurality of different types of user interfaces");

associating each client or user interface with a respective client or user interface messaging control (see col.15, lines 7-20 and 37-47):

Art Unit: 2155

controlling with interface control servers the plurality of outdoor environmental maintenance equipment (Fig.1, #17, #19, #21, #23, #25, #27; col.3, lines 13-17: "Each of the building automation subsystems includes at least one end device which is subject to control");

associating each interface control servers with a respective interface control server messaging controls (see col.3, lines 29-34: "generating command signals in accordance with a particular control protocol which may be device specific"); and

exchanging messages and communications between interface control server messaging controls and client or user interface messaging control messages using a common messaging control protocol for controlling the plurality of outdoor environmental maintenance equipment (see col.3, lines 22-29: "interprocess control commands" and col.4, lines 17-26: "generic commands"), each messaging control being usable for communication with at least two or more other messaging controls in the system (see col.3, lines 22-34 and 42-50: "translate control instructions in one particular control protocol to control instructions in another different control protocol" and lines 57-60: "relationship between control applications and user interface devices... can be changed during use") so that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment (see col.7, line 67-col.8, line 2: "exert control over these and other building systems" and col.15, lines 48-50: "controller 13 is thus capable of simultaneously interfacing to any number of these and other user interface devices"), and also can receive responses

Art Unit: 2155

containing information about each of the plurality of outdoor environmental maintenance equipment (see col.15, lines 54-55).

DEPENDENT:

As per *claims 22 and 30*, *Smith* further teaches wherein the common messaging control protocol is transmission control protocol/Internet protocol (TCP/IP) (see col.20, lines 35-44).

As per *claims 23 and 31*, *Smith* further teaches wherein the common messaging control protocol is text messaging (see col.12, lines 42-51 and col.48, lines 29-32).

As per *claim 24*, *Smith* further teaches wherein each interface control servers communicate with a respective interface control server messaging control using interprocessing (see col.3, line 65) calls/events (see col.4, lines 3-11; col.5, lines 13-20 col.16, lines 15-26 & 24-26; and 45, lines 56-59).

As per *claim 25*, *Smith* further teaches wherein the at least one client or user interface, the at least one client or user interface messaging control, the interface control servers, interface control server messaging controls, or a combination thereof, form part of different domains including either a personal computer (PC), a local area network (LAN), the world wide web (WWW), or a combination thereof (*see Fig.2A to Fig.3 and col.20, lines 45-54*).

As per *claim 26*, *Smith* further teaches wherein the plurality of outdoor environmental maintenance equipment includes an irrigation system, a pump station, a weather station or other environmental maintenance equipment (see Fig.1; col.10, lines 30-35; and col.18, lines 10-21).

Art Unit: 2155

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- B. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 6192282 B1) in view of Gray et al. (US 5568402 A).

As per *claim* 27, *Smith* does not explicitly teach wherein the client or user interface includes a system control and data acquisition (SCADA) having a messaging control arranged therein.

Gray teaches of client or user interface includes a system control and data acquisition (SCADA) having a messaging control arranged therein (see col.3, lines 14-39).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of *Gray* within the system of *Smith* by implementing (SCADA) having a messaging control arranged therein within a system for controlling a plurality of environmental maintenance equipment based on an open client-server architecture because Smith teaches that the invention may be implemented in "a centralized processing environment or a distributed processing environment" (see *Smith: col.2, lines 50-51*) and *Gray* teaches that "In a SCADA system, data respectively gathered by a plurality of remote stations is supplied to a master station and supervisory

control is performed on the basis of this data" (see Gray: col.1, lines 13-19). Therefore, since Smith teaches that in a distributed system, the automated subsystems are under the control of a local controller and a central controller (see Smith: col.44, lines 48-53), one of ordinary skill in the art would implement SCADA.

As per *claim 28*, *Smith* does not explicitly teach wherein the client or user interface includes one or more site managers, each having a messaging control arranged therein.

Gray teaches of wherein the client or user interface includes one or more site managers, each having a messaging control arranged therein (see col.3, lines 14-39).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of *Gray* within the system of *Smith* by implementing site managers, each having a messaging control arranged therein within a system for controlling a plurality of environmental maintenance equipment based on an open client-server architecture because *Gray* teaches that site manager within a local device "controls the starting and maintaining the transfer of data within the communications channel by the channel drivers" (see *Gray*: col.3, lines 54-56) and *Smith* teaches that his system employs plurality of channels in which "one or more communication channels must be selected to serve as "buses" to allow communication between the automated subsystems (see col.44, lines 48-51), therefore one of ordinary skill in the art would employ site managers for controlling communication of messages.

Art Unit: 2155

(10) Response to Argument

As per appellants' arguments filed April 27, 2006, the appellant(s) argue in substance:

- (A1) that the reference *Smith*, fails to anticipate the claimed invention "wherein each messaging control being usable for communication with at least two or more other messaging controls in the system so that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment, and also can receive responses containing information about each of the plurality of outdoor environmental maintenance equipment" as recited in independent claim 21, because the examiner incorporated embodiments of both *Smith*'s centralized system and *Smith*'s decentralized system and because *Smith* teaches of a centralized system 11 (1st embodiment) wherein it "includes numerous subsystems 41, 42, 45, 47, 49, 51, 53 all coupled to a centralized intelligent home controller 13 via different protocols" (page 6 of the Appeal Brief).
- (A2) that the reference *Smith* fails to anticipate the claimed invention "wherein each messaging control being usable for communication with at least two or more other messaging controls in the system so that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment, and also can receive responses containing information about each of the plurality of outdoor environmental maintenance equipment" as recited in independent claim 21, because *Smith* teaches of a decentralized system (2nd embodiment) wherein "*Smith*'s serial adapters 2015, 2017, 2019, and 2021 cannot provide messages for

Art Unit: 2155

controlling each of the HVAC 2009, security 2011, HVAC camera 2013 or weather 2014, or receive responses containing information about each of the same".

- (A3) that "claim 21 has eliminated the central controller 13 of Smith".
- (B) that the dependent claims 22-26 which depend directly or indirectly from claim 21, are not anticipated by *Smith* for the same reasons with respect to claim 21 above and that the reference *Gray* fails to cure the deficiencies of *Smith* with respect to claims 27 and 28.
- (C) that independent claim 29, is not anticipated by *Smith* for all the same reasons of with respect to claim 21 above.
- (**D**) that the dependent claims 30-31 which depend directly or indirectly from claim 29, are not anticipated by *Smith* for the same reasons with respect to claim 29 above.

In reply to the argument of (A1), *Smith* teaches in column 2, lines 49-51 that the "invention may be implemented in either a centralized processing embodiment or a distributed processing embodiment". *Smith* further teaches that although the embodiments might be different, the "basic system features" remain the same in both (see column 2, lines 53-56). Nonetheless, to simplify the arguments, replacement or additional reference locations have been provided in the (9) Grounds of Rejection above and explained below to show that the first embodiment of *Smith* (centralized system) explicitly teaches the claimed invention.

Furthermore, it is unclear as to why the appellant(s) believe *Smith*'s centralized system is "very different" from the claimed invention based on *Smith*'s teachings of including "numerous subsystems 41, 42, 45, 47, 49, 51, 53 all coupled to a centralized intelligent home controller 13 via different protocols" because the appellant(s) do not explain further of such difference. If the appellant(s) are relying on the basis that because *Smith* teaches of a "centralized" system, it is noted that the features upon which applicant relies (i.e., "decentralized" or "not centralized") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In column 3, lines 42-50, *Smith* teach that the control instructions are translatable from one protocol to another protocol. This is so that the system can be modular in design (see column 3, lines 1-9) to overcome limitations of prior art. *Smith* adds in column 3, lines 22-34 that of the at <u>least one controller</u> is provided "to store and selectively execute program instructions, including the set of interprocess control protocol" wherein <u>each</u> subsystem generates command signals "in accordance with a particular control protocol" utilization of several generic command to pass information between processes within the system" (emphasis added). Clearly such recitation explicitly teaches the limitation "wherein each messaging control being usable for communication with at least two or more other messaging controls in the system".

In column 7, line 67 to column 8, line 2, *Smith* teaches that the user interface is employed to allow "operator to interact with controller 13 in order to exert control over

Art Unit: 2155

these and other building systems" (emphasis added). Furthermore, in column 15, lines 48-50, *Smith* teaches that the "controller 13 is thus capable of simultaneously interfacing to any number of these and other user interface devices" (emphasis added). Clearly the recitation explicitly teaches the limitation "that each client or user interface can provide messages for controlling each of the plurality of outdoor environmental maintenance equipment". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "multiple" on page 6 of the Appeal Brief), although taught by *Smith*, are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Lastly, in column 15, lines 54-55, *Smith* teaches of providing feedback to the user which explicitly teaches the limitation "and also can receive responses containing information about each of the plurality of outdoor environmental maintenance equipment".

In reply to the argument of (A2), again, it is unclear as to why the appellant(s) believe *Smith*'s decentralized system is "very different" from the claimed invention based on *Smith*'s teachings of "serial adapters 2015, 2017, 2019, and 2021 cannot provide messages for controlling each of the HVAC 2009, security 2011, HVAC camera 2013 or weather 2014, or receive responses containing information about each of the same" because the appellant(s) do not explain further of such difference. Nonetheless,

the argument is most because the rejection is based on only the centralized embodiment of *Smith*.

In reply to the argument of (A3), it is noted that the features upon which applicant relies (i.e., "eliminated the central controller" or "subsystems are capable of direct communication with each other") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Clearly, *Smith* teaches of "each messaging control being usable for communication with at least two or more messaging controls" as explain in (A1) above. The employment of a central controller does not negate this limitation. The appellant(s) are asserting that the claims above equitable to "each interface control server being usable for direct communication with at least two or more interface control servers" when in fact the claim limitation is directed to the messages and does not recite direct communication.

In reply to the argument of **(B)**, dependent claims 22-26 are anticipated for the same reasons above with respect to replies **(A1)-(A3)** and the rejection set forth above. Additionally, with respect to claims 27-28, *Gray* is only relied upon to cure the deficiency of an interface including "a system control and data acquisition (SCADA) having a messaging control arranged therein", since Smith clearly and explicitly teaches all the other limitations of claims 27-28.

Art Unit: 2155

In reply to the argument of (C), independent claim 29 is clearly anticipated by

Smith for the same reasons above with respect to replies (A1)-(A3) and the rejection set

forth above.

<u>In reply</u> to the argument of **(D)**, dependent claims 30-31 are anticipated for the

same reasons above with respect to replies (A1)-(A3) and the rejection set forth above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

June 20, 2006

Conferees:

Page 17

SUPÉRVISORY PATENT EXAMINER

Michael Won

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SUPERVISORY PATENT EXAMINER